

## ABSTRACT

Generalized queues and specialized registers associated with the generalized queues are disclosed for coordinating the passing of information between two tightly coupled processors. The capacity of the queues can be adjusted to match the current environment, with  
5 no limit on the size of the entry as agreed upon between the sending and receiving processors, and with no practical limit on the number of entries or restrictions on where the entries appear. In addition, the specialized registers allow for immediate notifications of queue and other conditions, selectivity in receiving and generating conditions, and the ability to combine data transfer and particular condition notifications in the same attention register.

10